



**Town of Shutesbury**

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Via Electronic Mail: [dtc.efiling@mass.gov](mailto:dtc.efiling@mass.gov)

February 7, 2021

Shonda Green

Department of Telecommunications and Cable  
1000 Washington Street, Suite 600  
Boston, MA 02118-6500

**Re: D.T.C. 20-4; Petition to Remove Surety Bond Requirement for Utility License Agreements for Municipalities**

Dear Ms. Green,

This letter is a response to the three utilities companies, National Grid, Eversource and Verizon regarding our Petition to Remove Surety Bond Requirement for Utility License Agreements for Municipalities.

Each company has outlined and provided evidence to support their assertion that our municipality should continue to pay these fees because the bonds provide necessary protection for the utilities if the Town fails to:

- relocate or repair facilities on poles when requested
- pay annual attachment fees
- remove facilities from all poles in the case of total insolvency

We continue to assert that the surety bond is unreasonable and will provide further explanation in this letter to support our position based on four main points:

1. Municipal entities are more financially stable than commercial enterprises and are unlikely to abandon their fiber assets.
2. Full removal of all assets from all poles is unlikely.

3. There is a lack of historical evidence that the bonds are necessary.
4. The required bond coverage is more than double the total removal cost.

**Municipal entities are more financially stable than commercial enterprises and are unlikely to abandon their fiber assets.**

The main difference that sets municipal networks apart from commercial enterprises is that the network's operations are backed by the Town's finances and tax base. If ShutesburyNET were to have financial difficulty, the town's real estate tax base could provide a reliable source of revenue to cover such a shortfall. Shutesbury tax payers are indirectly the owners of our fiber network. Commercially held enterprises, whether public or private, have no such ability to finance their business by taxing property owners in the municipalities where they provide a service.

Any fiscal or financial insolvency a Massachusetts town might face would be caught early during the annual state-mandated audits. Another difference between municipalities and private companies is that Town finances are governed, regulated and monitored by strict state oversight to help ensure that all municipalities in the Commonwealth are financially sound.

As the utilities pointed out, it is not a perfect system and sometimes towns do go bankrupt. But if that were to happen, it is still unlikely that the surety bond would be invoked. When a town in deep financial stress declares bankruptcy, a predictable series of events happens. The town reduces services and raises a tax levy and is shepherded through the process with the help of the State until they emerge as financially solvent. But during bankruptcy towns still continue to provide municipal services such as tax collection and police and fire protection. Unlike private companies, Towns do not just disappear and abandon their assets. This is another critical difference between municipalities and private companies.

ShutesburyNET provides an essential service and would continue to run and collect revenue even during a bankruptcy, were that to happen. This revenue would support basic operations and pay for any required maintenance work including annual fees owed to the utilities. It would have to. ShutesburyNET is financially run as an Enterprise Fund within the town's financial structure. Massachusetts Department of Revenue Enterprise Fund accounting regulations stipulate that collected funds cannot be used for any purpose by the Town other than providing internet and phone service to its subscribers, even if the town faced bankruptcy. Revenue earned by ShutesburyNET can

only be spent towards network expenses, and so a municipal network being unable to pay for basic maintenance work and annual utility fees is unlikely to happen.

In addition, state law *requires* towns to preserve all valuable assets in the case of bankruptcy. Even if *public access* to our network could no longer be sustainably provided, the Town would continue to use it exclusively for municipal police, fire and public safety purposes. This type of use is a stipulation of every pole placement agreement granted by the Town to the utilities. Exercising this particular entitlement is sometimes referred to as “municipal gain.” It is quite common for towns in New England to apply that right, and those municipal systems do not pay attachment rental fees or require any surety bonds, as the Eversource response acknowledges in the fourth paragraph of their response.

The way we maintain our fiber network demonstrates another significant difference between municipalities and private companies. Unlike private companies (or even the utility companies themselves!), we have a constant and invested physical presence where our network facilities are located. Our Highway Department monitors hazards on the public ways that threaten utility lines and mitigates risk through regular tree maintenance. In addition, the Fire Department is on call at all hours every day of the year to remove fallen trees, manage emergencies and clear roadways for utility repair vehicles. Unlike private companies who only use the space on the poles to provide services from afar, we have a constant physical presence to help maintain and protect the utility lines on our public ways.

Our National Grid contract states in Section 3.0 Fees and Charges that “the financial security requirement may be waived in writing by the Licensor.” Therefore, it is apparent that surety bonding can easily be waived to reflect different third-party risk factors. As a town that has been here for 280 years, prudently managed and dutifully paying all our bills and meeting all of our obligations, we would argue that we present much less risk than any commercial third-party attacher and should be granted one of those waivers.

**Full removal of all assets from all poles is unlikely.**

If Shutesbury were to disband town government entirely and completely abandon all of its assets, thus requiring the utilities to take on the responsibility of our fiber network, it is still unlikely that the utilities would invoke the surety bond in order to remove all facilities from all poles. The fiber network that ShutesburyNET has constructed has

significant value especially to those utilities that offer internet and phone service to residential subscribers. Other potential providers would be likely to step in and buy this asset if ShutesburyNET ceased operation.

Verizon cites ShutesburyNET as a direct competitor for its services. But competition implies that Verizon offers a comparative service to the residents of our town. They do not. The only service they offer is slow speed DSL to a small portion of our town that runs on outdated copper wire technology. The decision by Verizon not to upgrade the infrastructure and services to our area is the reason we had to build a municipal network in the first place. The fact that 87% of the town's residents use ShutesburyNET's services shows that there are no viable alternatives. Even if we were to abandon all of our fiber assets, Verizon could utilize them to provide the services they currently cannot. The fiber network we have constructed on all the poles in town has a useful life of 30 to 40 years and would continue to be used, if not by Verizon, then by one of its competitors.

The strength and reliability of the pole system that supports the electrical service in town is enhanced by the steel cables that we have installed to support our fiber network. Therefore, even if the network infrastructure was not used for telecommunications, it would be a poor operational decision for the power utilities to remove our fiber cabling system in its entirety. (See Sephton affidavit)

**There is a lack of historical evidence that the bonds are necessary.**

We can look to history to show that there appears to be little actual need for these bonds. The utilities state they are aware of many municipal network failures, but they did not give any examples of any of those failures where they actually invoked the surety bond and took down the municipal fiber cable systems. None of the three utility responses provide any evidence, or cite a single instance, that these surety bonds paid for by municipalities has ever been invoked. If the utilities can provide evidence where a surety bond has been invoked in the Commonwealth or elsewhere in the nation over the last few decades, that might be helpful information for the DTC to consider when making this ruling.

**The required bond coverage is more than double the total removal cost.**

If the above points don't convince the stakeholders that a removal of our fiber network from the utility poles is unlikely and unnecessary, it is important to examine the actual financial risk to the utility companies.

If the utility companies did decide to remove the entire network attached to their utility poles, we have determined the cost would be \$315,000.<sup>1</sup> Because poles are jointly owned, the licensing agreements require \$300,000 in coverage for both Verizon and National Grid and another \$75,000 for Eversource. This means we are paying for a grand total of \$675,000 in coverage. Yet a network can only be removed once. The surety bonding requirements are unreasonable because they are more than double what the removal liability would actually cost.

In conclusion, the utility companies are correct; we cannot absolutely guarantee that our municipal fiber network would never become insolvent. But because municipalities are different from commercial or corporate entities, the chance of insolvency is very low. The utilities have not provided one example of an instance where the surety bond for a municipally owned fiber network has had to be invoked, even for a failed network.

If ShutesburyNET ceases operation, the Town will maintain the fiber under its municipal gain entitlement as described. As a valuable town asset it has to be preserved and maintained by law. Therefore over 95% of the current surety bond amount covering total removal is not justified. The fiber network we have built in our town, paid for by our taxpayers and with funding from State grants, is a valuable and essential asset that will last for many decades to come. We respectfully petition the DTC to eliminate or amend the surety bond requirements to reflect what is actually reasonable in light of the facts above.

Thank you for your consideration.

A handwritten signature in black ink, appearing to read 'Gayle Huntress', with a stylized, flowing script.

Gayle Huntress

MLP Manager, Town of Shutesbury

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<sup>1</sup> \$7500 per mile for removal and disposal of fiber system for 42 network miles. Estimate provided by Collins Electric, Chicopee, Massachusetts using prevailing wage rates.

## Affidavit of Graeme Sephton

I, Graeme Sephton, do attest and swear the following:

1. I am a recently retired registered professional engineer. For about 20 years until my retirement in 2019, I was the senior engineer and Cable Project Manager for the UMass, Amherst, IT Department. My duties included design, construction, and maintenance of all UMass fiber and phone system outside plant cabling. As part of my duties, I also applied for and administered the pole attachment licenses we had with various utilities in Amherst and Hadley. I am currently a member of Shutesbury Broadband Committee, and previously a member of the town's MLP Board.
2. I have carefully read the "DTC 20-4" responses to our petition; from Verizon, National Grid, and Eversource. In those responses they assert that it is necessary and totally "reasonable" to require that ShutesburyNET maintain sufficient and duplicated surety bonding to completely remove its fiber cabling system, in the event, say, that it failed financially.
3. It is my professional opinion that in Shutesbury, on the whole, it would negatively impact the power system reliability if the utilities were to take down the support strand of the whole fiber system. The reason is that the fiber support strand adds additional strength and stability that helps protect the complete utility pole and cabling system from tree damage during severe storms. The fiber support cable and guys add an incremental benefit everywhere which benefits ALL utilities and everyone in town, due to the enhanced reliability of the power and phone systems. It even helps to keep roads more passable for emergency vehicles during severe storms as well.
4. In the material below I will support that opinion, providing both a simple theoretical explanation and evidence from recent utility incidents that provide some of the experiential basis for my opinion.
5. The theory is quite straightforward. If one galvanized steel utility support strand (with the phone cable) can resist some specific maximum impact from a falling tree, then adding a support strand about 12" above the phone cable will almost double the tree impact force that can be withstood on average. Note: the impact force is generally much greater than the force of the dead weight of the tree. Therefore, if a cable span can survive the tree impact it will nearly always be able to then support the fallen tree. See Case #1 below.
6. Two steel support strands attached about 12" apart at the poles are **an ideal combination** for very significantly increasing the ability to prevent falling trees breaking

cables or tearing them off poles. Twelve inches minimum is the pole attachment spacing that is required, and is therefore quite typical. In such a configuration, the **two support strands act like a shock absorber**. The upper support strand (MLP's) will slow up the falling tree to some degree. But if it cannot stop the tree (**see Case 1 below**) as it takes up any slack and then stretches, then the tree, now slowed and resisted by the MLP strand, will then hit the Verizon support strand. The support cable spacing thus provides the benefit of spreading the impact shock over that short duration. There is an added benefit because the 12" attachment separation at the poles also spreads the impact shock over a larger segment of the pole (rather than concentrating the stress at a single attachment point if there is only one support). Thus, spreading the impact over both time and the 12" pole segment, means that falling trees that could not be stopped by a single support strand by itself have a much better chance that two support strands might hold them. The two support strand combination also reduces the amplitude of the impact shock wave and will save at least some poles from snapping that otherwise might fail. Also the impact shock wave propagating to the immediately adjacent poles will be significantly diminished and therefore less damaging overall, and on average.

7. **CASE #1:** On October 9, 2020 in the vicinity of 785 Wendell Rd. Shutesbury, I happened to turn up in time to observe a tree utility crew clearing a fallen beach tree off the utility lines where it was hanging. **Picture #1** shows the tree has swung down, stretching the power primary and neutral cables like rubber bands, all the way down to about 11 feet above the road, and pinned them with the MLP and Verizon lines all jammed together. In **Picture #2** the tech standing on the ground gives a sense of scale and how far down the primary is stretched. **Picture #3** shows the tree tech, having freed the primary cable which popped back up like it was elastic. **Picture #4** shows the cables all popped back up to normal configuration.

8. Two nights before, in our whole region, there were many severe wind events that had caused power outages and road blockages, but this incident on Wendell Road caused no disruption of power, phone or MLP broadband services. Because the combined cables held the tree up and off the road, the utility tree crew was able to put this work off more than a day while they addressed more urgent actual service disruption problems.

9. It was very obvious to me that the primary cables were very close to their stretching and failing limit. And consider, when the tree initially fell to its lowest point during impact, it must have briefly stretched down even lower. If the fiber support had not been there, the primary power line would have bounced down to at least a few feet lower and would more likely have failed. Or if there was only a Verizon cable and it broke, then the power lines would have definitely snapped too.

10. It is impossible to know if the combined MLP/fiber support was critical in saving the stretched primary from snapping on this occasion. But in some similar situations with bigger trees, or longer and lower spans, it is very reasonable to expect that a single (Verizon) support strand will sometimes be insufficient and break. It is quite evident that with two support strands in tandem, like Case #1, the chances of the primary power circuit surviving such events is enhanced and reliability is therefore increased. Likewise the phone system.

11. It is reasonable to conclude that such a survival enhancement on average, would increase the overall reliability of the power system and phone system to everyone's benefit. If the tree had broken the two support strands, then the primary cable would have definitely snapped. On this occasion, no powerline utility repair (apart from the tree crew) was required and our fiber support strand may have been essential to that outcome. Anything like this that helps prevent the power primaries from snapping, on average, logically also lowers the repair costs for the power utility and increases the reliability.

12. Roughly 50% of utility pole spans in Shutesbury are similar to the Case 1 situation, but also include secondary power distribution cables supported by the neutral cable. On spans with secondary power distribution cables it is reasonable to conclude that there will be a similar protective benefit overall, if not as great.

13. Case #1 is also a recent example that undermines Verizon's Toland Affidavit, which makes a generalization about the "rarity" of events like this. It is very apparent in **Picture #1** that the fiber support strand provides additional strength well beyond what "...is necessary " to support "...the additional strain those facilities put on the line...", at P 7. The fiber support cable very obviously helped arrest the falling tree. And then it helped support the dead weight for over 24 hours. And no Verizon truck crew ever needed to roll in Case #1 because the phone line did not break and did not even get damaged.

14. Case #1 also shows that both phone and fiber cable supports are designed with plenty of redundant strength, and well beyond just merely supporting the phone or fiber cables. Also, it should be noted that fiber cables are much lighter than phone cables. For example, a typical 200-pair 24AWG OSP phone cable is more than four times as heavy, per foot, as a 288-fiber cable. They each typically are supported by the same size galvanized steel support strand, so the fiber cable load is small compared to copper phone lines. I would also note, in response to Toland P 6., that Shutesbury is definitely not proposing creating any "...abandoned plant..." situations.



15. Also, it should be noted, Verizon nearly always requires third-party-attachers to install **above** their phone lines. They show operational wisdom in that. It is my experience that there are definitely more cable hazards coming from above than from below, and our cable system therefore provides some unacknowledged “**umbrella**” benefit to them; especially in a woodsy town like Shutesbury. (Examples follow.) It is especially apparent in a **climate** that is recently becoming more **extreme** and **unpredictable**. And the trees grow bigger every year on average.

16. Because of my role on the town committee and my professional interest, I always try and go see any trees that fall on the MLP and utility lines. Our system has only been up and running since the end of 2019.

17. Even in that brief period we have seen a few very severe wind events, and other intense storms, which disrupted local utility and MLP services and which have impacted the reliability and the repair costs of the joint pole-owners and our MLP. The current weather trends deserve particular consideration for both the utilities and the DTC. Pole and cable support schemes were optimized in gentler times. The current weather trends also arguably make our recent fairly brief MLP experiences more relevant than the 20-year averages that older experts like Mr. Toland (or myself) might otherwise generalize from.

18. The Town is safer if falling trees are less likely to get all the way down to the road. The reason the utility tree crew did not need to rush to clear the tree hung up for more than a day on Wendell Rd was because vehicles and emergency services could still squeak by the cable-supported tree. Any such benefit during extreme weather is worth a lot to our local public safety services and of course makes it easier for **emergency utility access** and repairs as well. This extra overall pole/cable system strength and stability enhances all utility reliability at no extra cost to them. Occasionally 3<sup>rd</sup>-party cables might inconvenience linesmen with slightly more congested poles, but the installation safety codes optimize cable separation so as to mitigate the problem significantly.

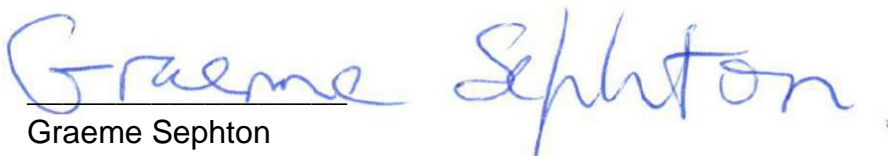
19. **Case #2**, at 75 **Montague Rd**, in Sept 2020 storm event. I know of two occasions just last year where the Verizon phone line appears to have benefited from the “umbrella effect” of an MLP cable just above. In Case #2, a falling tree broke the bare uninsulated power primary cable which then fell down and shorted to the grounded fiber support strand. The arcing flash cut clean through the steel support strand and burned the fiber jacket. See “**Montague Rd**” Pictures. The fiber was fried but amazingly it kept working fine until it could be replaced some weeks later.

20. The Leverett MLP reports two very similar incidents, where the Eversource power primary cable was broken by falling trees and arced to the MLP support overlappings and strand. That occurred on Dudleyville Rd, Leverett around October 2020. And a similar event occurred in ~2018 on Jackson Hill Rd, Leverett. The fiber support cable in both cases took the arcing current and the fiber burned to failure, while the Verizon lines immediately below appeared to be unscathed.

21. The MLP cable in these situations tends to provide protection for the Verizon cable. It is reasonable to believe there is a very good chance that if the MLP strand was not there just above the Verizon line, the bare primary would have arced to the grounded phone support cable and burned the phone lines instead. Phone service would have been impacted and Verizon repair costs incurred. Three cases that I am aware of, within 10 mile radius in three years, make it seem not in fact "rare" in our region. There is a definite "umbrella benefit" for Verizon that would make the MLP cable removal a poor cost and reliability decision for them.

22. The final reason why the Verizon surety bond is not needed to cover the removal of the fiber in Shutesbury is the absurdity of such an action. It will be the obsolete and deteriorated Verizon copper phone lines that will be taken down long before the fiber should be removed. Of course, they might have other non-operational reasons to remove or discourage a 3<sup>rd</sup>-party competitor like our fiber. And if ShutesburyNET fails, and the public network shuts down, then the Town will maintain the fiber system and use it exclusively for public safety and in compliance with our rights written into every utility pole placement license.

Signed under the pains and penalties of perjury,

  
Graeme Sephton

2/5/2021

CASE #1: Wendell Road

PICTURE #1: Primary power cables and phone and fiber all pinned together



CASE #1: Wendell Road

PICTURE #2: Close-up





CASE #1: Wendell Road

PICTURE #3: Power cable freed



CASE #1: Wendell Road

Picture #4: All cables freed with no disrupted services





CASE #2: Montague Road

Picture #1: Fiber support cable shown cut and hanging



CASE #2: Montague Road, Picture #2: Fiber support cable

